

Butler, Nicholas Murray
Monographs on education

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DIVISION OF EXHIBITS
DEPARTMENT OF EDUCATION
UNIVERSAL EXPOSITION, ST. LOUIS, 1904

MONOGRAPHS ON EDUCATION
IN THE
UNITED STATES

EDITED BY
NICHOLAS MURRAY BUTLER
President of Columbia University in the City of New York

15
EDUCATION OF DEFECTIVES

BY
EDWARD ELLIS ALLEN
*Principal of the Pennsylvania Institution for the Instruction of the Blind,
Overbrook, Pennsylvania*

DEPARTMENT OF EDUCATION

UNIVERSAL EXPOSITION, ST. LOUIS, 1904

Chief of Department

HOWARD J. ROGERS, Albany, N. Y.

MONOGRAPHS

ON

EDUCATION IN THE UNITED STATES

EDITED BY

NICHOLAS MURRAY BUTLER

President of Columbia University in the City of New York

- 1 EDUCATIONAL ORGANIZATION AND ADMINISTRATION — ANDREW SLOAN DRAPER, *President of the University of Illinois, Champaign, Illinois*
- 2 KINDERGARTEN EDUCATION — SUSAN E. BLOW, *Cazenovia, New York*
- 3 ELEMENTARY EDUCATION — WILLIAM T. HARRIS, *United States Commissioner of Education, Washington, D. C.*
- 4 SECONDARY EDUCATION — ELMER ELLSWORTH BROWN, *Professor of Education in the University of California, Berkeley, California*
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EDUCATION OF DEFECTIVES

Systematic care of the defective classes began in America in 1815, when a young theological student, Thomas Hopkins Gallaudet, started for Europe to study methods of teaching the deaf and dumb. A school for this class was opened in 1817, one for the blind in 1831, and one for the feeble-minded in 1845—practically fifteen years apart. In each case the first schools were in New England, the second in New York, the third in Pennsylvania; and these schools followed one another quickly. All started in the face of more or less distrust as to their feasibility. At first all were experimental, being started through private initiative. A few pupils were taught and exhibited before the amazed public, when in the case of the deaf and the blind private funds in abundance were contributed and the schools quickly established as private corporations. In the case of the feeble-minded the first school to be incorporated was a public organization—that is, it was supported by the state. Before 1822 the state had not been educated to the point of supporting schools for the special classes, but by 1848 it was ready to see its duty towards even the idiotic, though wealthy people were by no means prepared to contribute directly to schools for them.

The three states named having led the way, the movement spread quickly into Ohio, Kentucky, Virginia and Illinois—in almost identical order for each special class. Here, however, the schools for the three classes arose as state institutions. It had become an accepted part of public policy for the state to provide a means of education for all her children. The superintendents of the early schools for the deaf and dumb were generally clergymen; those of the blind and the idiotic, generally physicians. The institutions were necessarily boarding schools; and the early ones were

established as a rule in or near the state capitals, chiefly that their achievements might be kept before the members of the legislatures, on whose practical sympathy the continuance of the schools usually depended.

The large private or semi-public institutions are confined to the eastern states, where the movement began. Their support comes chiefly from private bequests and the interest on invested endowment funds. All, however, receive what is termed state aid, and all make annual report to the state legislatures, to the commissioners of public charities or of public education, as the case may be. All these institutions are governed by honorary boards of trustees or managers, who appoint the superintendent or principal. In the semi-public organization the managers form a self-appointing, close corporation; in the public, they are appointed usually by the state governor, by whom they may also be removed.

The semi-public institutions are usually well endowed. Their expenditures are, therefore, not limited by legislative grant; and, moreover, these institutions are free from political interference, an interference which, in the case of several of the state organizations, has seriously affected from time to time the efficiency of the institutions themselves. As a rule, the institution plants are large and well equipped. Even when within the built-up cities the buildings are surrounded with ample lawns and playgrounds. The appropriations of money are generous, whether the schools are public or semi-public. The earlier institutions were built on the congregate plan; the later and those that have been rebuilt have generally adopted the segregate or cottage plan.

The pupils are not committed to these institutions, but are admitted or rejected by the boards of trustees on the recommendation of the superintendents.

The early institutions for all three classes of defectives began purely as schools. And all those existing to-day, except those for the feeble-minded, discharge or graduate all pupils after these have completed the course of instruc-

tion. With the feeble-minded this plan was found to be inexpedient, for reasons which will be stated later.

A very recent movement, started by the instructors of the deaf, is the affiliation of the educators of the defective classes with those of the national educational association. It is being more and more recognized that the line between a defective and a normal child cannot be drawn hard and fast, and that many a child who appears dull and stupid in school is in some measure defective. Hence, these special schools afford fields of most helpful suggestion to teachers of ordinary children. All persons intending to make teaching a vocation should become acquainted with these schools and their methods.

It is interesting to note that systematic work for the deaf and dumb, the blind, and the feeble-minded began in France, and that to France America sent its early teachers to study methods and ascertain results.

THE DEAF

About the middle of the last century three schools for the deaf and dumb were opened in Europe, one in France, one in Germany, and one in Scotland. Though they sprang up at about the same time they were yet wholly independent in origin. In Paris the Abbé de l'Épée having observed two deaf-mute sisters conversing by means of gestures, seized upon the idea that in gesture language lay the secret of instructing the deaf and dumb. He therefore elaborated a system of gesture signs and made it the medium of instruction in the school which he started. Heinicke in Dresden and Braidwood in Edinburg simply adopted articulate speech as the language of man and taught their pupils through it, requiring them to speak and read the lips of others. Thus arose the two important methods of deaf-mute instruction.

Reports of the successes, chiefly in the British school, having reached America, several parents of deaf-mutes sent their children to Scotland to be educated. These deaf

children returned no longer as mutes; they were able to converse readily by speaking and lip reading. One of these parents was so delighted with his boy's schooling that he published a book in London and wrote articles for the New England periodicals, with the intention of arousing interest in the new work. This man also took steps to ascertain the number of deaf-mutes in Massachusetts. Another man in Virginia, some of whose relatives had attended Braidwood's school, even opened a little school for deaf and dumb pupils in his state, employing as its teacher one of the Braidwood family, who had come to America for the purpose of continuing in the profession of his family here. This was in 1812. The school was the first of its kind started in America. However, it was soon given up, as was a similar effort in New York, where a clergyman undertook to instruct several deaf children whom he found in an almshouse.

Though the events above touched upon seemed to result in little, they yet had great effect in directing intelligent attention to this field of work. They constitute its preliminary stages.

It happened in Hartford, Conn., that there was a physician, one of whose little daughters had become deaf. Why could not this child be educated as well as her hearing sisters? With this thought he spent some eight years in agitating the question of starting a school for deaf children. In 1815 money enough was raised in a single day to defray the expenses of sending a teacher abroad to study methods. A young graduate of Yale college and of a theological seminary was chosen as the teacher to go. This was Thomas Hopkins Gallaudet, who was destined to become the founder of deaf-mute instruction in America.

Of course he went to Great Britain. He proposed to study the only method that Americans knew about. But the doors of the British schools were closed to him. He found the science and art of teaching the deaf regarded as a business monopoly, whereas he had expected to find it conducted from his own motive of philanthropy. After

wandering about there for nine months he gave up hope of acquiring the Braidwood method and accepted an invitation to study methods at the Paris school. At this school he spent the three remaining months of the year, a time far too short in which to acquire the special language of gesture signs. Hence, he induced a deaf-mute, who was teaching in the school, to accompany him to America. This man was the brilliant and accomplished Laurent Clerk, who became an engine of power for establishing schools for deaf-mutes in our country. Thus was the French method or the sign-language method brought to America. It was improved and further systematized by our early teachers and in this form was the basis of instruction in all our schools for half a century.

During the absence of Dr. Gallaudet, influential men of Hartford had secured from the state legislature the incorporation of the Connecticut asylum for the education and instruction of deaf and dumb persons. Upon his return he and Mr. Clerk traveled for eight months among prominent cities in behalf of the cause of the deaf. The exhibition of Laurent Clerk alone helped the cause as nothing else could have done. On April 15, 1817, school work began at Hartford with seven pupils. During the year 33 pupils came. This was the first permanent school in the country. While in other countries similar schools had no reliable basis of support, the founders of our schools immediately established theirs on a permanent basis. Private aid was necessary at first, but no sooner had the feasibility of the work been shown than public moneys were granted.

In this year the Connecticut asylum changed its name to the American asylum at Hartford for the education and instruction of the deaf and dumb; for it was then supposed that one school could accommodate for many years all the pupils of the country who would attend school. But interest in the schooling of deaf-mutes had been aroused in other places. In 1818 a school was opened in New York under a teacher from Hartford; and in Philadelphia, where Dr. Gal-

laudet and Mr. Clerk had gone to obtain aid for the Hartford school, an humble storekeeper by the name of Seixas began to teach, in 1819, a little class of deaf pupils, and he was so successful that an institution was organized in 1820 with Seixas as first teacher and principal. In a very few months he was succeeded by a permanent principal from Hartford. Back in 1819 Massachusetts had provided an appropriation for the education of 20 indigent pupils at Hartford, and in 1825 New Hampshire and Vermont adopted the same policy. "Other states soon followed this good example. Thus, through the efforts of the founders of this [the Hartford] school, the humane, just and wise policy of educating deaf-mutes at the public expense was firmly established in this country, and has been adopted by almost every state in the union. In some of the western states means for the education of deaf-mutes are secured by constitutional provision. This has put the schools for deaf-mutes in the United States on a better basis, financially, than those in any other part of the world."¹

Only two years after the founding of the Pennsylvania school, Kentucky followed with its institution, being the first to be supported by a state. The act establishing it limited the pupils at any one time to 25, and their term of instruction to three years. In fact limits of this kind are usually prescribed in all the early institutions. (The Illinois school now has 612 pupils, and the New York schools allow a term of 17 years.) The first principal of the Kentucky school went to Hartford for a year to study methods. Ohio and Virginia soon followed in the good work. Both received their first superintendents from Hartford. Thereafter institutions sprang up rapidly in the south and west, taking their early superintendents or teachers either from the parent school at Hartford or from one or another of the older schools.

In 1857 there was incorporated by the national congress the Columbia institution at Washington, D. C., which requires

¹ Histories American schools for the Deaf.—American asylum, 1: 13.

special mention. Though originally intended as a school where the deaf children of government beneficiaries could be educated, circumstances of which not the least influential was the energy of its principal, Dr. Edward M. Gallaudet, son of the pioneer, soon brought about a change enabling the institution to confer collegiate degrees. The institution was then divided into two departments, the advanced department taking the name of the National deaf-mute college. Thus, in 1864, America had taken a step "unprecedented in the history of deaf-mute instruction."

Most of the deaf and dumb are either born deaf or become so before acquiring language. They are dumb because they are deaf, and without special instruction can never know any but a gestural language. The pioneer educators of the deaf in this country were all "broad-minded men of liberal education," and they set a high standard at the outset for the work. A language of signs they saw was the key to the instruction of their pupils, who, indeed, were allowed so few years of schooling, that no time was to be lost in laboring over the extraordinary difficulties of teaching them speech. Moreover, these teachers saw with great satisfaction the development of their pupils through the language of signs.

This language is ideographic — "being readily expressive of ideas and emotions," rather than of phraseology. Put into words their order is entirely different from the natural order, thus, "Let it be supposed that a girl has been seen by a deaf-mute child to drop a cup of milk which she was carrying home. He would relate the incident in the following order of sign words: Saw-I-girl-walk-cup-milk-carry-home-drop."¹ The late superintendent of the Illinois institution, Dr. Gillett, writes: "When reduced to a system they [signs] form a convenient means of conveying to one mind the ideas conceived by another, though not clothed in the language in which a cultured mind expresses them. One addressed in the sign language receives the idea and translates it into

¹ Encyclop. Brit. (9th ed.) Am. reprint—Art. Deaf and dumb.

English without any intimation of the phraseology in the mind of the speaker, so that a dozen persons familiar with the sign language, observing the gesticulations of a speaker, would each translate correctly the thoughts given forth, but no two of them would be in exactly the same phraseology. It is a concrete language, in which the expression of abstract ideas is exceedingly difficult."¹ As the ideas are given out chiefly by means of hand gestures, schools using the sign language as a means of instruction are said to follow or use the manual method.²

Among the manually-taught deaf this language early becomes the vernacular. As it is a language of living pictures, such deaf people think in pictures and dream in them. The sign language is said to be to the deaf what spoken language is to the hearing; and yet its use in the school room is deemed by many teachers extremely detrimental to the acquisition of the English language, and, therefore, unwise.

All our educators of the deaf agree that giving to their pupils the ability to use the English language is their chief end and aim. They differ widely, however, over the use of signs. The greater number believe a moderate use of them to be economical of time and extremely useful to the deaf in the acquisition of knowledge. There is a small but growing number who dispense with signs *in toto* just as soon as possible. These latter teach by the intuitive, direct or "English language method." They teach English by and through English, spoken, read and written.

It is extraordinarily difficult to get started by the oral or English language method. But teachers of this method claim that once well started their pupils advance more

¹ Gillett. Some notable benefactors of the deaf. Pp. 14-15.

² The simple sign for *cat* well illustrates the graphic nature of the language. In order to teach this sign, a sign teacher "would show the child a cat, if possible, or a picture of a cat, which would be recognized by the child. The next step would be to direct attention to the cat's whiskers, drawing the thumb and finger of each hand lightly over them. A similar motion with the thumb and finger of each hand above the teacher's upper lip at once becomes the sign for cat. The instructed deaf child will be expected to recall the object, cat, on seeing this conventional sign." Gordon. The difference between the two systems of teaching deaf-mute children the English language. Pp. 1-2.

logically, more surely, more precisely, and finally more swiftly than the pupils of those permitting the intervention of signs. Advocates of using the signs together with other means claim that the minds of most of their new pupils are sluggish from want of language to think in, and that they need to be aroused by the quickest method; that their pupils have already lost too many years of youth, and that to cause them to lose more because of a theory is wrong and wicked. This school asserts that "A large percentage of the deaf under proper methods can obtain a very useful amount of speech and lip-reading, but [that] there is also a large percentage of them that would be greatly restricted in their mental development, if allowed no other means of instruction," and continues:

"We are striving to take the golden mean, placing first in importance mental development and a knowledge of written language, and adding thereto in the case of every child speech and lip-reading to the degree that his capacity and adaptability allow him to acquire them."¹

And again, "For rapid and clear explanation, for testing the comprehension of the pupil, for lectures and religious instruction before large numbers of pupils, there is no other means equal in efficiency to the sign language. Its proper and conservative use always tends to mental development, saves time, and is the most efficient aid known in the acquisition of written and spoken language."²

The other school affirms that the two methods or systems are mutually exclusive, saying: "Of course no pupil can be taught under the intuitive and the sign method at the same time, and it is impossible to combine into one system a method which is dependent upon the 'sign' language at every stage of instruction with a method which dispenses absolutely with the 'sign' language at every stage in teaching the English language. In the 'sign-language' method instructors aim to teach the vernacular language through

¹ Third Biennial Report American school, p. 12.

² First Biennial Report American asylum, p. 17.

the intervention of signs, but their deaf-mute pupils acquire a mixture of natural signs, pantomime, conventional signs and finger spelling which becomes the habitual vehicle of thought and expression, wherever it is possible to use a gestural language, to the exclusion of the English language. The intuitive method dispenses entirely with the crutch of the 'sign-language' in the mastery of English."¹

A form of the English language method, taught at the Rochester (N. Y.) institution, substitutes finger spelling for signs as these are used in manual schools, and is called the "manual alphabet method." Superintendent Westervelt says of it, "It is the principle of our method of instruction that the child has a right to receive instruction through that form of our language which he can understand most readily, with the least strain of attention, and the least diversion from the thought to the organ of its expression."²

So much for the rival methods, which, however, it is absolutely necessary to understand if we would comprehend the history of deaf-mute education in America.

The history of the rise of the oral method is interesting. As has been said, the manual method reigned supreme for the first fifty years of the work. In 1843, Horace Mann, secretary of the Massachusetts state board of education, and Dr. Howe, director of the Perkins institution for the blind in Boston, made a tour of Europe. In his next annual report Horace Mann praised the oral method as taught in Germany, stating that it was superior to the method employed in America. The report was widely read, and caused no little commotion among our teachers of the deaf, several of whom went abroad to see for themselves. These gentlemen did not agree with Horace Mann, and little change was then made in American methods. Still as a result of their recommendations, classes in articulation were introduced into several schools. Later, in 1864, the father of a little deaf girl in Massachusetts began to agitate for the incorporation of an

¹ Gordon. The Difference between the two systems of teaching, etc., p. 3.

² Histories of American schools for the deaf, West. New York inst., 2: 11.

oral school in that state. A small private school of the kind was soon opened near Boston. In the nick of time — for the opponents of opening an oral school were active — a Mr. Clarke of Northampton offered to endow a school for the deaf in Massachusetts. The project being favored by the governor of the commonwealth, and by Dr. Howe, who was then secretary of the state board of charities, the legislature incorporated in 1867 the Clarke institution at Northampton, which was opened as an oral school. In the same year a former teacher of an Austrian school opened in New York what soon became the New York institution for the improved instruction of deaf-mutes.

This invasion of the field so long occupied by the silent method of signs occasioned much controversy. Dr. Edward M. Gallaudet, president of the Columbia institution, at once went abroad to examine schools and their methods. Upon his return he reported that if the whole body of the deaf were to be restricted to one kind of instruction, he favored results to be obtained by the manual methods of America; but he maintained "the practicability of teaching a large proportion of the deaf to speak and to read from the lips,"¹ and advocated the introduction of articulation into all the schools of the country. As a result a conference of principals of American institutions met at Washington, which adopted resolutions in the line of President Gallaudet's recommendations. Classes in articulation were then very generally introduced.

During the next few years a gradual movement abroad towards the abolition of signs was evident; and at the second international conference at Milan, in 1880, an overwhelming majority of the delegates present voted in favor of the oral method. Even the French delegates were found to have abandoned the method that originated with them in favor of the oral method. At the various conventions of the American instructors of the deaf, more and more atten-

¹ Quoted in Gordon's notes and observations upon the education of the deaf, p. xxix.

tion came to be paid to the question of methods. Then, conventions of articulation teachers were held. In the meantime Dr. Alexander Graham Bell had introduced to teachers his father's system of visible speech, a system of written characters devised to show the position taken and the movement made by the tongue, teeth, lips, glottis, and other vocal organs in articulation. A similar but simpler system of visible speech symbols had been independently worked out by a Mr. Zera Whipple, of Mystic, Connecticut; and more recently the Lyon phonetic manual has been devised, which is founded on the principle of visible speech and may be written in the air by the fingers. In 1888 the royal commission of the United Kingdom voted "that every child who is deaf should have full opportunity of being educated on the pure oral system," but that those found physically or mentally disqualified "should be either removed from the oral department of the school or taught elsewhere on the sign and manual system."¹ In 1890 the American association to promote the teaching of speech to the deaf was incorporated, with Dr. Alexander Graham Bell as president. Dr. Bell immediately endowed the association handsomely.

Ever since Horace Mann stirred up the waters in 1843, they have remained in more or less agitation. And this fact has had a grand effect upon the work. It cannot be denied that at times the controversy over methods has been bitter; to-day, however, it has been reduced to a generous rivalry, in which the champions of the various methods and systems are striving with might and main to find out the best means of instructing the deaf and to pursue it. The majority of our schools do not limit their teaching to any one method, but are eclectic, calling themselves "combined system" schools. Satisfaction with the original uniformity of method would not have meant progress; and certainly the work for the deaf in this land of opportunity has progressed remarkably. No other country has so many deaf pupils under instruction as this has, none has provided so

¹ Quoted in Gordon's notes and observations, p. xlii.

generously for them, and there is none in which their educators are more alert to test new inventions and appliances that may bear upon the methods of instruction. And yet, unquestionably, the education of the deaf is still in its youth.

The early principals saw the need of exchanging ideas, and soon after the beginning of the work started an organ of communication. This organ, "The Annals of the deaf," is now in its 44th volume. It is a quarterly magazine,¹ conducted under the direction of a committee of the conference of superintendents and principals of American schools for the deaf. It is a high-class, much-prized periodical, and is said to be the leading publication of its kind in the world. In the pages of the Annals have been published articles on all manner of questions relating to the deaf. Its editor, Dr. Edward A. Fay, has made a most thorough investigation into the results of marriages of the deaf. His data and conclusions have appeared in a volume published by the Volta bureau.

The Volta bureau is a unique institution. The Volta prize of 25,000 francs awarded by the French government to Dr. Bell for his invention of the telephone, he applied to the founding of a bureau for the purpose of collecting and diffusing knowledge concerning the deaf. This is the Volta bureau of Washington, D. C. It has already published a large number of papers, studies, and books.

The influence of Dr. Bell upon the work for the deaf has been deep and lasting. The invention of the telephone itself resulted from his experiments upon a device which he hoped would enable the deaf to read the vibrations of the human voice. Though a Scotchman by birth, he is practically an American, and has devoted his best energies and his means to furthering the work which he has made his profession. His great efforts have been towards the promotion of speech-teaching to the deaf.

"The instruction of the deaf is one of the most difficult

¹ It now appears six times a year.

fields in the entire department of education for achievement at once successful and satisfactory to the teacher."¹ For many years the parent school at Hartford was parent in the sense of providing principals and teachers for other schools. The New York institution has also furnished schools with many officers and teachers. It is only within comparatively recent years that normal classes, as such, have come to exist in a few of the schools. Among others, the Clarke institution, the Wisconsin phonological institute, the school at Bala, Pa., and Gallaudet college have them—the latter announcing that it has opened to a limited number of college graduates annually, normal fellowships of \$500, tenable for one year. Thus has the standard of deaf-mute teaching come to be in line with modern university methods of training teachers.

Public day schools for the deaf have sprung up in various places. The Horace Mann school of Boston is a notable example. They fill an unquestioned need, as many parents refuse to send their deaf children off to an institution. A still further movement towards decentralization has come to pass in Wisconsin. Wherever in this state a few deaf children can be gathered near their homes, state aid will be given to pay teachers sent there to teach them. And this movement is tending to become more and more general. All these day schools spread the oral method. An important effect of the rise of this method has been the lowering of the age when deaf children are received, and of lengthening their term of instruction; also of largely increasing the number of women teachers employed. The Home for the training in speech of little deaf children before they are of school age, at Bala, takes children at the age when normal children learn to talk and teaches speech by talking to them and having them talk back as if they heard. There are several private oral schools for the deaf in this country where the pupils pay tuition. One of the best is the Wright-Humason school in New York.

¹ Gillett. Some notable benefactors of the deaf, p. 3.

With the lowering of the age of pupils, kindergarten methods have been made use of more and more; though no true kindergarten can be conducted in schools where language comes so hard and so late, where even natural signs are arbitrarily interdicted, and where there can be no music. But the occupations and the games are widely applicable and are now universally used.

From the above discussion it is seen that the deaf child comes to school with almost no language to think in, his only means of expressing his wants being crude natural signs. Such being the case, the first duty of the teacher is to establish communication with him and thereafter, during his whole course at school, more than in any other kind of educational work, to make language the end of training and other subjects the means of varying language teaching. This statement is strictly true only of elementary education, but then the majority of deaf pupils do not advance far beyond the elementary stage; not because they cannot, for they can, but because so very much time is absorbed in language work that their progress in other things is slow; then, too, parents are prone to call their boys away from school as soon as they believe these can help sustain the family. A few of the brighter and more ambitious pupils from the schools take the course at the National deaf-mute college, now called Gallaudet college, where they have "an opportunity to secure the advantages of a rigid and thorough course of intellectual training in the higher walks of literature and the liberal arts." Occasionally we hear of deaf pupils taking high school work in schools with hearing pupils, and even of being graduated from colleges of the hearing.

The course of training at American schools for the deaf has always been practical. Indeed, industrial training is almost essential for those young people who would form industrious habits and facility in the use of tools that will put them on their feet when they enter the world of labor; for most deaf pupils will have to work for their living. Their educators have a magnificent incentive in the knowl-

edge that the trained deaf are not at all disqualified from earning a living by simple inability to hear. In their schools general manual training is followed with a pupil until, for one reason or another, he chooses his trade or it is chosen for him. The general equipment for trade teaching is excellent. Printing is an extremely useful occupation for the deaf, especially in the acquisition of idiomatic language; and nearly every institution for their instruction publishes one or more papers.

Our educated deaf people form a quiet, well-behaved, self-supporting part of the community. They have formed local and national societies for mutual benefit. The convention of the deaf that met in 1893 at the Columbian exposition at Chicago was the largest meeting of the kind ever held. Their speeches and deliberations and social gatherings occupied several days. That a convention so great and so remarkable could have been held was a source of great pride and satisfaction to those engaged in educating the deaf.

Within the grounds of Gallaudet college at Washington stands a beautiful memorial statue of Gallaudet teaching a little deaf and dumb girl. It was presented to the college by the deaf of the whole country. In this memorial the deaf have made fitting recognition of their indebtedness to education.

THE BLIND

When it is stated that prior to 1830 the blind of America were to be found "moping in hidden corners or degraded by the wayside, or vegetating in almshouses," it is the adult blind that is meant. Still blind children were occasionally found in these places, though it could scarcely be said that they were vegetating, as could be said of the untrained deaf children. Their ability to hear and speak does not cut off the blind from the education of communion with friends and associates. The needs of the blind, then, were not so evident or so early forced upon people's attention as were those of the deaf and dumb children. Blind children were less

often seen than deaf children, for the simple reason that there were and always are fewer of them. This fact was not then realized. The British census of 1851 first showed the world that over 80 per cent of the blind are adults. Our schools for the blind were started, *first*, because of the widespread interest in the results of educating the young deaf and dumb, which furnished inspiration for new fields of educational endeavor; *secondly*, because the country was coming to the conviction that all the children of the state should receive education both as a matter of public policy and as a private right; and *thirdly*, because reports of what had been accomplished abroad in schools for the blind were being promulgated in our land.

By 1830 the more progressive states of the east were ready to give their blind children school training. In that year the government first included in the national census the deaf and dumb and the blind. The work of the blind was to begin with scientific foreknowledge as to their number.

Private ardor to begin the work had been smouldering for several years, when in 1829 certain gentlemen in Boston obtained the incorporation of the "New England asylum for the blind." This was before they had selected either the pupils or a teacher for them. By a most fortunate circumstance, the interest and services were obtained of a graduate of Brown university, Dr. Samuel G. Howe, who after finishing his medical studies had chivalrously gone to the aid of the Greeks. This gentleman became the American father and Cadmus of the blind. He went at once to Europe to study methods of instruction. Upon his return, in 1832, the school was opened with six pupils. In New York the act of incorporation of the New York institution for the blind was passed in 1831; but funds were needed and no one went abroad to study methods. This school opened in March, 1832, antedating by a few months the school at Boston. In the very same year a German teacher of the blind, a Mr. Friedlander, most opportunely came to

Philadelphia, in the hope of starting a school for the blind there. The way the enterprise was put through is typical of many other beginnings of special schools in America. Having trained certain blind children he exhibited their accomplishments, *first*, to a few influential people, *secondly*, before a large audience among whom he distributed a leaflet, "Observations on the instruction of blind persons." A meeting of public-spirited citizens followed, funds were liberally contributed, fairs held, and the success of the cause was assured. The Pennsylvania institution for the instruction of the blind was opened in 1833, fully ten months before an act of incorporation was obtained.

The three schools at Boston, New York and Philadelphia are called the pioneer schools. All sprang from private effort and private funds. All were incorporated as private institutions, and remain so to this day. Two similar institutions for the blind have arisen in this country, that at Baltimore and that at Pittsburg.

The origin of the state schools differs from that of the type above given only in that classes of trained pupils from the earlier schools were exhibited before the state legislatures, as well as before the people. State appropriations followed and the institutions were inaugurated as state institutions. The new schools sprang into being with astonishing rapidity. There are now in 1899 40 schools for the blind in the United States, and every state in the union makes provision for its blind of school age either in its own school or in that of a neighboring state.

In our sparsely-settled country, especially west of the Alleghenies and south of Maryland, great efforts had to be made to find the children and still greater efforts to persuade the parents to send them to school; and in many regions similar conditions of parental ignorance exist to-day. In certain states where the amount of the public fund seemed to preclude a special grant for the blind, pupils of this class were brought together in connection with a school for the deaf and dumb, forming "dual schools," as they are called.

These institutions could not help being unfair to their blind contingent ; for in nearly every such case the blind came to a school already established as a school for the deaf, and under the superintendence of a man especially interested in the education of the deaf ; moreover, the number of the deaf pupils usually far exceeded that of the blind. There are still a few of these dual schools, but wherever possible they have been divided into two distinct institutions.

In northern schools the colored blind are educated with the white ; in southern schools it is best for the colored to have schools of their own. Both the whites and they prefer this arrangement. The first school for the colored blind was opened in North Carolina in 1869.

All the institutions for the blind were in their very inception schools. The pioneer schools imported literary teachers from Paris and handicraft teachers from Edinburg. At first only the brighter class of pupils came under instruction. Teaching them was easy. They progressed with amazing strides ; all was enthusiasm ; exhibitions were called for and widely given (Dr. Howe's pupils gave exhibitions in 17 states) ; large editions of the various annual reports were exhausted. Soon, however, less bright pupils came to be admitted ; then the curriculum of studies began to sober down to the practical and comprehensive one prevailing to-day. Whatever occupation the boy or girl expects to follow after leaving school, it is assumed he will follow it better and thus live more happily and worthily if he has a general education. When, as was formerly the case, the period or term of schooling allowed pupils was shorter than it is now, they were not admitted before the age of eight or nine. Now that kindergarten departments have been universally added to the schools, the pupils are urged to enter at an early age ; because experience has shown that at home these little blind folks are coddled rather than trained, so much so in fact that by the time many of them come to school their natural growth of body and mind has been so interfered with by inaction, that all the efforts of the schools

cannot make up for lost time and opportunity. The principle of periodicity of growth has now come to be understood and the importance of applying the proper stimulus at the period most sensitive to it, comprehended. Children with good sight and hearing have got along without kindergarten training, and so have blind children, but of all the useful means of reaching and developing the average blind child none is so effective as the properly-conducted kindergarten. It is not easy to overestimate the importance of hearing as giving the child language and all that this means, song and the joy it brings and the deep feeling it inspires. The practical knowledge of things comes to the blind through the hand, their fingers being veritable projections of their brains. Thus must their hands not only be trained to sensitiveness of touch but to be strong and supple, so that they may, indeed, be dexterous; for as their hands are so are their brains. The kindergarten cultivates ear and heart and hand and brain as nothing else does. Even color is not wholly omitted in kindergartens for the blind. Many see colors, and those who do not love to talk about them and certainly derive some indirect value from considering them. Kindergartens for the blind may be true kindergartens in every sense of the word. A kindergartner of fully-sensed children would miss here only the brightness coming from the untrammelled ability to run and play and observe all that sight brings into view, the quick response of "I know," "I have seen this," and "I have been there." But, then, kindergartens for the blind have as their end and aim this very arousing of the children and the putting of them in touch with their surroundings.

Blind children with kindergarten training are more susceptible to instruction than those without it. Above this department the course of studies in American schools requires from seven to eight years, which means a primary, a grammar and a high school education, or instruction in object lessons, reading, writing, spelling, grammar, composition, arithmetic, history, physiology, botany, zoology, geol-

ogy, physics, algebra, geometry, civics, English literature, typewriting and sometimes Latin and modern languages. Not a few pupils have fitted for college where they took the regular course with the seeing students, and from which they were graduated usually with distinction. Formerly much of the teaching was oral, which, in many cases, was apt to be more pleasant than profitable to the pupil. Since the general introduction of the embossed text book and tangible writing, the pupil has been forced to depend more and more upon himself, obviously with better results. In fact, the work has been growing more and more practical. The methods of teaching the blind correspond in general to those of teaching other hearing children. The common appliances have but to be raised and enlarged as in maps and diagrams, or simply made tangible, which may be done, for example, by notching an ordinary ruler so that the graduations can be felt. A successful teacher of the seeing readily adapts herself to the instruction of the blind. She learns to write their punctographic systems and to read them with the eye.

Industrial training has been an integral part of the school course from the beginning. Recently educational manual training has been generally introduced as preliminary to the trades. Sloyd has been found especially adapted to the blind. The handicrafts — chair-caning, hammock-making, broom-making, carpet-weaving, and a few others, alone remain of all the many trades taught at one time or another in our schools. Manual occupations of some kind will always be taught, even were it evident that none of them would be followed by the blind as trades; for it is by doing and making that the blind especially learn best. Then, it is essential that they be kept occupied. They are happier so and far better off. In the past, before the introduction of such varieties of labor-saving machinery as the last half century has seen, many of the discharged pupils followed some manual trade and succeeded in subsisting by it. To-day this is less and less possible. The mind itself of the blind is least trammelled by the lack of sight; hence some

pursuit where intelligence is the chief factor would seem to be best adapted to his condition.

Music, of course, opens up his most delightful field. It is said that all the force of the superintendents of the early schools was required to prevent the institutions from becoming mere conservatories of music. To-day only those pupils pursue music in regular course who have talent for it; but even those are not allowed to neglect other studies for it. It is the experience of the American schools as of the European, that the profession of music offers to the educated and trained musician who is blind, a field in which he can work his way with least hindrance from his lack of sight, and many are they who have found in it a means of livelihood for themselves and their families. A few in nearly every school fit themselves to be tuners of pianos.

The importance of physical training was early recognized; for the blind have less vitality and more feeble constitutions than the seeing; besides, those of our pupils who most need exercise, are least apt to seek it of their own accord. At first the schools had no gymnasiums; of late years such have been pretty generally added, and systematic physical exercise is carried out.

The American schools for the blind were founded upon embossed books. Dr. Howe states somewhere that the simple reading from embossed print did more to establish the schools in the country than any other one thing. Extraordinary pains were taken by Dr. Howe and his assistants to perfect a system which should be at once readily tangible to the fingers of the blind and legible to the eyes of their friends. The result was the small lower case letter of Dr. Howe, the Boston line print, as it is often called. To this the jury gave preference before all other embossed systems exhibited at the great exhibition of the industry of all nations, in London, in 1852. Backed by such indorsement and all the authority of Dr. Howe the system was rapidly adopted into the American schools. It was then the theory that the blind would be further isolated from their friends

if their alphabets were dissimilar. The blind of themselves had devised a writable system — arbitrary and composed of dots or points — one which they could both read and write. But the early superintendents would not countenance it. However, many of the blind failed to read the line letter system; because to read it requires extreme nicety of touch, which all the blind by no means have. Characters composed of points not of lines are scientifically adapted to touch reading. In the 33rd report of the New York institution, Supt. Wm. B. Wait wrote: "Now, which is the more important, that all the young blind should be able to read, thus being made, in fact, like the seeing, or that they should be taught an *alphabet which in some sort resembles* that used by the seeing, but by doing which only 34 per cent of them will ever be able to read with any pleasure or profit?" This attitude of the New York school was the outcome of statistics gathered from seven institutions, in which 664 pupils were involved, and of experiments made by Mr. Wait with his own pupils, using a system scientifically devised by him, composed of points in arbitrary combination. This was in 1868. At the next convention of the American instructors of the blind, it was resolved "That the New York horizontal point alphabet as arranged by Mr. Wait, should be taught in all institutions for the education of the blind." Not long afterwards a national printing house was subsidized, from which the schools obtained free books, both in the point and in the line systems. In a very few years the point books were in increasing demand, and to-day most of the schools prefer them to those in the line print.

The acceptance of the point was due to several things,—first of all, to its writability and superior tangibility, and secondly, to the extraordinary energy of a few of its advocates. The old world was a long time accepting a writable point system. That of Louis Braille, devised in 1829, though much used by individuals, was not officially adopted into the Paris school where it originated until 1854. In contrast, America devised, printed, spread, and resolved to

accept its writable system in less than one-half the time. The benefits of a tangible writable system are vast. It puts the blind more nearly on a par with the seeing, particularly as pupils in school. Its adoption here, next to that of tangible printing, makes obtainable the ideal of American schools for the blind.

Every tangible system has its defects. French "braille" as adopted into England has antiquated abbreviations and contractions for the use of adults; and is involved with rules allowing much bad use, like the omission of all capitals. The New York point as printed also laid itself open to much criticism as to "good use." The American braille, the latest system, combining the best features of French braille and of New York point, was devised by a blind teacher of the Perkins institution. It takes full account of "good use," and those who use the system deem it very satisfactory. In 1892, when the American braille system was adopted into several schools, a typewriter for writing braille was invented, and this was followed by the invention of another machine for embossing braille directly on plates of thin brass from which any number of duplicates could be struck off on paper.¹ Here was a means of creating a new library at once. But the chief value of the invention lay in the fact that as the machine was simple and inexpensive and could be operated if necessary by a blind man, any institution could have a printing office of its own. And several schools immediately established such offices, from which they issued at once whatever their school classes demanded. By co-operating in the selection of the books to be embossed these schools have created in the space of seven years a library of books in American braille than which there is no superior in any system in any country, and they have added an immense amount of music in the braille music notation, which is the same all over the world. A typewriter, and a machine for embossing brass plates in the New York point system, have also appeared.

¹ For these inventions, which have been of the greatest recent service to the education of the blind, the work is indebted to Mr. Frank H. Hall, sup't of the Illinois school.

The production of books in both point systems is going on parallelly. Whether this is wise or not it is certainly wasteful. And yet the antagonism of the advocates of the rival systems is so great that the race may continue for some years yet. The matter is, however, not so "stupid" as it would seem to be. There is nothing like competition to eliminate defects and bring out excellences. Moreover, there has been evolution in systems of ink print as there has been in systems of embossed print. In either case that which eventually survives will be the fittest and will be worth all the trouble it caused to make it survive.

Excellent embossed libraries exist in all three of the systems. Books in all three may be obtained from the National printing house for the blind at Louisville, Ky., where many of the plates have been made and where most of them are kept. This printing house was subsidized by congress in 1873, and since that time has spent \$10,000 annually in the production of books in the various systems, music scores in the New York point notation, and tangible apparatus, each school ordering from the published list, books, etc., to the value of its quota or part proportional to the number of its pupils. The printing office of the Perkins institution at Boston is the largest private enterprise of its kind in the world. It has been running almost continuously since 1834, and has put forth a splendid list of books in the Boston line print.

American generosity to its defectives has not only provided institutions unsurpassed in their general appointments elsewhere, but the proverbial American ingenuity has supplied the classrooms with appliances and mechanical aids to instruction unequaled in any land. The interest in the work for the blind taken by those actually engaged in it may be seen by a reading of the annual reports of the superintendents, which have served as a means of communication among the schools and between these and the public. France, Germany and Italy have been publishing for many years, magazines or periodicals in the interest of the blind.

For four years this country produced "The Mentor," a monthly which was so excellent and timely that it ought to have been kept up. However, it was supported but poorly and was stopped for that reason. America, then, has no organ of communication among workers for the blind. The superintendents and teachers engaged in this work first met in convention in 1853. The Association of American instructors of the blind was formed in 1871, and has met biennially ever since, usually as the guest of one or another of the institutions. The proceedings of each convention have been published.

The principles underlying the scheme for educating the blind being to make them as little as possible a class apart from the rest of the community, it has not been deemed wise to attempt to establish a national college for the higher education of those capable of taking it, but efforts are making towards enabling the brighter and worthier pupils to attend one of the colleges for the seeing, at the expense of the states or the schools from which they come. The school instruction of the blind is comparatively an easy matter. The work is less of a science than the more difficult task of instructing the deaf and dumb. But if we consider the results, it must be admitted that it is far easier to fit the intelligent deaf to be self-supporting than it is to fit the blind to be so. The world of practical affairs is the world of light; and if the blind succeed in that world it is certainly to their credit. And yet we expect them to succeed in it; and having given them the best preparation we can devise, we find that many do succeed, some brilliantly. Just what proportion "succeed" is not known; for in the vast areas of our large states the majority go out and are lost to view. Many—especially the girls—go home to become helpful in the family, and these live on there as centers of light and culture, and so what was once deemed a calamity, may become to the family a blessing in disguise.

In 1878 an exhaustive census of the graduates from all over the country was compiled. It revealed the following

encouraging facts: 16 became superintendents of other institutions; 214 became teachers or were otherwise employed in institutions; 34 became ministers of the gospel; 84 authors, publishers or lecturers; 310 were engaged as teachers of music or were vocalists outside of institutions; 69 had been organists in churches; 125 piano tuners; 937 had been engaged as teachers, employees, and workers in handicraft; 277 were storekeepers, etc.; 45 became owners and managers of real estate; 760 (mostly women) were employed at housework at home or in families, or at sewing with machines, or by hand, and 78 were in homes of employment.¹ Further, according to the 10th census of the United States (1880) when there were 48,928 blind in the land, but 2,560 were found in almshouses.² What proportion of these ever attended our schools, will never be known, but it must be remembered that blindness is an affliction of old age.

According to statistics printed in the report for 1879 of the New York institution, "More than 1,200 persons have been instructed, and have gone out from the institutions for the blind in this state [New York], only 21 of whom were found to be in almshouses on the 30th of October, 1879. Such facts give great force to a statement made by the board of state commissioners of public charities upon this subject. They say: "As observation shows that educated blind persons seldom become a public charge, it would seem important, not only in its social bearings, but as a question of political economy, to bring *as many of the blind as practicable under proper educational training.*"³

THE DEAF-BLIND

"Obstacles are things to be overcome" is the motto given by Dr. Howe to the Perkins institution for the blind.

When this remarkable man learned in 1837 that up in the mountains of New Hampshire there was a little girl not only

¹ Proceedings fifth bien. conv. of the American association of instructors of the blind, p. 21.

² Compendium 10th census, 2, 1702.

³ Pp. 32-33.

blind but also deaf and dumb, he eagerly sought out the child and obtained the parents' consent to take her to South Boston to be educated. He had already formed a theory as to how he would reach a mind thus doubly shut in, and with the finding of Laura Bridgman came the wished-for opportunity to test this theory.

It should be noted that Laura Bridgman saw and heard until she was two years old. She had been rather a delicate child, however, having enjoyed only about four months of robust health, when she sickened, her disease raging with great violence during five weeks, "when her eyes and ears were inflamed, suppurated and their contents were discharged."¹ Her sufferings continued for months, and it was not "until four years of age that the poor child's bodily health seemed restored."² She was intelligently active, following her mother about the house, seeming anxious to feel of everything, and thus to learn about it; and she developed signs for her father and her mother, and for some things.

She was eight years old when brought to the Perkins institution. Dr. Howe writes: "There was one of two ways to be adopted: either to go on and build up a language of signs on the basis of the natural language, which she had already herself commenced, or to teach her the purely arbitrary language in common use; that is, to give her a sign for every individual thing, or to give her a knowledge of letters, by the combination of which she might express her idea of the existence, and the mode and condition of existence, of anything. The former would have been easy, but very ineffectual; the latter seemed very difficult, but, if accomplished, very effectual; I determined, therefore, to try the latter."³ After the child had become adjusted to the change of homes, Dr. Howe began teaching her by means of common articles with which she was familiar — spoons, forks,

¹ From reports of Dr. Howe on Laura Bridgman, appendix C, 48th annual report, Perkins institution for the blind, p. 160.

² Same source and page.

³ Same source, pp. 162-3.

keys, etc., on which labels with their names printed in raised letters had been pasted. Similar detached labels were given her to feel. Her touch was acute enough, hence she was able to match labels, placing that for book on the book, etc. She did this easily and willingly because she received approbation for so doing; but the idea that the printed word stood for the name of the object had not entered her brain. Then other detached labels were cut up into their component letters. These her memory soon enabled her to build into wholes or the words she had felt. Such exercises continued for many weeks to be only a meaningless play to the poor child. The success had been "about as great as teaching a very knowing dog," when suddenly the idea flashed upon her that "Here was a way by which she herself could make up a sign for anything that was in her own mind, and show it to another mind, and at once her countenance lighted up with a human expression; it was no longer a dog or parrot, —it was an immortal spirit, eagerly seizing upon a new link of union with other spirits! I could almost fix upon the moment when this truth dawned upon her mind, and spread its light to her countenance; I saw that the great obstacle was overcome, and that henceforward nothing but patient and persevering, plain and straightforward efforts were to be used."¹

Next, she was given metal type each bearing some embossed letter, and a frame with holes to receive them. With this appliance Laura readily wrote the name of any object she knew and by writing them fixed in mind an extensive vocabulary of common names. Then the less cumbersome manual alphabet was taught her. Here was a means by which she could both write and read; she could spell to her teacher and read what her teacher spelled into her hand.

Dr. Howe's reports teem with interesting psychologic material. At the end of the year he writes: "She is nine years of age, and yet her knowledge of language is not

¹ Same source, p. 164.

greater than a common child of three years. There has been no difficulty in communicating knowledge of facts, positive qualities of bodies, numbers, etc.; but the *words expressive of them*, which other children learn by hearing, as they learn to talk, must all be communicated to Laura by a circuitous and tedious method. In all the knowledge which is acquired by the perceptive faculties, she is of course backward; because, previous to her coming here, her perceptive faculties were probably less exercised in one week than those of common children are in one hour.”¹

And so her instruction went on. Through it all the child showed, an eagerness to learn and to put herself in touch with the world that was a powerful aid to the teacher. In a few years, when Oliver Caswell, also deaf, dumb, and blind, came to the institution, Laura naturally took great interest in teaching him, and thereby profited much herself. As she approached womanhood her education was already good. Laura had learned to sew, to knit, and to do fancy work, and so employed her time when not reading or conversing with her many friends. She often visited her home but her true home was the institution. There she lived to her 60th year and there she died, the first case of any one so afflicted made capable of leading an industrious and happy life, and as the first case, historically the most remarkable.

Popular interest in Laura Bridgman, both in this country and abroad, was naturally very great. The printed reports of her progress which were eagerly awaited were as eagerly absorbed. Distinguished foreigners coming to Boston visited her. Charles Dickens wrote in his American notes a sympathetic account of his impressions of her. Naturally enough in succeeding cases of the deaf-blind that from time to time came under instruction in one school or another, much less interest was shown. The way to give liberty to the imprisoned mind had been made plain.

In the year 1887, however, something like the old interest

¹ Same source, p. 167.

was aroused by the publication of accounts of the brilliant deaf, dumb, and blind child in Alabama, Helen Keller. This child had lost sight and hearing at 19 months as a result of a serious illness. Like Laura she kept actively interested in all that surrounded her, and like Laura she developed her own little language of signs. When she was six years old, her friends, who knew of Laura Bridgman's case, applied to Boston for a teacher. In the following year Miss Annie M. Sullivan was sent. This lady was able to put herself in touch with Helen in a very short time and in a marvelous way. In fact, she has proved herself to be a most remarkable teacher. Following in general the methods adopted in teaching Laura, Miss Sullivan began her work by putting Helen in possession of the manual alphabet. A doll was happily chosen to begin with; and with the doll on the child's lap, the teacher formed in Helen's hand the finger letters *d-o-l-l*. Other familiar objects were similarly introduced, and strange as it may seem, that which had taken three months to reach in Laura's case in Helen's took but a few days;¹ or, in Miss Sullivan's words, "it was more than a week before she understood that all things were thus identified."² Her teacher writes: "Never did a child apply herself more joyfully to any task than did Helen to the acquisition of new words. In a few days she had mastered the manual alphabet and learned upwards of a hundred names."³ After teaching verbs and prepositions through action and position Miss Sullivan made a departure. She began to use new words in connection with old words, letting Helen understand them if possible from the context. The child adopted these words "often without inquiry." In this way she became familiar with the use of many words whose meaning never had to be explained to her.

As to the letters of the raised alphabet, Miss Sullivan writes: "Incredible as it may seem, she learned all the let-

¹ See 56th an. rep. Perkins inst. for the blind, p. 82.

² Same source, p. 101.

³ Same source, p. 101.

ters both capital and small in one day.”¹ Then came the primer; then pencil writing than which there is scarcely a more difficult exercise for the blind to learn; and yet Helen “wrote without assistance a correctly spelled and legible letter to one of her cousins; and this was only a little more than a month after her first lesson in chirography.”² Braille, or tangible point writing, became a constant delight to her.

Words like *perhaps* and *suppose* and those indicative of abstract ideas she learned more through association and repetition than through any explanation of her teacher. The child had the language sense largely developed. Much of the time when no one was talking with her she was reading in books printed in raised letters. Dr. Bell in trying to account for Helen’s wonderful familiarity with idiomatic English, considers of great significance the statement of Miss Sullivan that, “long before she could read them [the books] . . . she would amuse herself for hours each day in carefully passing her fingers over the words, searching for such words as she knew.”³

In 1888, when Helen was 8 years old her teacher took her to South Boston where she could have the advantage of all the appliances and embossed books that a school for the blind affords. Thenceforth an account of her progress reads like a romance. It was no more difficult for her to learn a new word in German or in Greek than in English; and she took great delight in picking up and using French or Greek phrases. And when later she came to study these languages, she seemed to advance without effort in the knowledge of them.

The educators of the deaf, who have good reason to comprehend the exceeding difficulty of teaching their pupils to articulate intelligibly, feel that Helen Keller’s rapid mastery of speech is by all odds her most wonderful achievement. After she had been in South Boston some little time she heard of a Swedish girl afflicted like herself, who had learned

¹ Same source, p. 103.

² Same source, p. 104.

³ Amer. annals of the deaf, April, 1892, p. 134.

to speak, and she said, "I must learn to speak." Miss Sullivan took her to Miss Sarah Fuller, principal of the Horace Mann school for the deaf, and though Helen's only means of learning the position of the vocal organs in speech was to put her fingers on the lips, tongue, teeth, and throat of the speaker, she learned in ten lessons¹ to articulate so well that she could carry on an intelligible and audible conversation, having communication addressed to her spelled into her hand by the manual alphabet. She has learned since that time to read from the lips and throat of a speaker by placing her fingers lightly on them; so that any one sitting near her can converse with her just as though she could both hear and see. She spent a winter at the Wright-Humason private school for the deaf, where she improved her articulation.

When Helen was sixteen years old she entered the Cambridge school for girls, Miss Sullivan accompanying her. There, under the guidance of Mr. Arthur Gilman, the director of the school, she took the course preparatory to entering Radcliffe college. At the end of one year she took the regular required examinations in the history of Greece and Rome, in English, in Latin, in elementary French, in elementary German, and in advanced German. As the questions and other matter were read into her hand by Mr. Gilman himself, Helen wrote her answers and translations on an ordinary typewriter. Her papers were read by the regular examiners. She passed the tests in every subject, taking "honors" in English and German. Mr. Gilman writes: "I think that I may say that no candidate in Harvard or Radcliffe college was graded higher than Helen in English."²

There are still other children afflicted like Helen who are doing splendid work, but, "taking this child all in all," says Dr. Job Williams, principal of the American school for the

¹ See Sarah Fuller's article How Helen Keller learned to speak, *Annals of the deaf*, Jan. 1892, p. 26.

² Miss Helen Adams Keller's first year of college preparatory work. *American Annals of the Deaf*, November, 1897.

deaf at Hartford, "and making due allowance for every possible aid that has been given her, and for all unconscious exaggeration due to friendly admiration, there yet remains so much that is marvelous as to place her beyond comparison with any other child of whom we have ever heard. The whole history of literature reveals nothing equal to her language productions from one of her years, even among those possessed of all their faculties. She is a genius, a prodigy, a phenomenon."¹

The other deaf-blind children under instruction are some at schools for the blind, some at schools for the deaf. They must always have a special teacher, and use embossed books and adapted appliances. All are being taught on principles used in teaching Helen. In South Boston, where there are several, they attend classes with other pupils, the special teacher acting simply as interpreter and companion.

THE FEEBLE-MINDED

The term feeble-minded is now used to embrace all classes and grades of the mentally defective, excepting the insane, who, properly speaking, are mentally sick. Idiocy was the term formerly used to cover the same range. Idiocy or feeble-mindedness may be defined as "mental deficiency depending upon imperfect development, or disease of the nervous system, occurring before, at or after birth, previous to the evolution of the mental faculties."² At the time the feeble-minded were first taught, it was supposed that their growth of body and mind, which was seen to be but partial, had simply been stopped by malign influences, and that in many cases all that was needed was proper environment in order to start the growth again; it was hoped that the improvable cases at least could be educated and trained to approach in capacity the normal-minded individual.

With the end in view of so educating idiots, as they called them, the first attempts to train them in this country were

¹ Annals of the deaf, April, 1892, p. 159.

² Quoted in Fernald's Feeble-minded children, p. 2.

made in 1848. Before then idiots who were not kept at home were to be found in almshouses or in insane asylums, where they were sadly out of place. Kind-hearted physicians who saw this "rubbish of humanity" cowering in terror before lunatics or abused by almshouse associates, agitated for their relief, care, and training. The movement began in New York and Massachusetts in the year 1846. Massachusetts was more ripe for the work; for the matter had no sooner been presented to the legislature than this body appointed a commission to report upon the number, condition, and the best means of relieving the idiots in the commonwealth. Dr. Samuel G. Howe, the director of the Perkins institution for the blind, was made chairman of the commission. Its report made in 1848, and widely known as "Dr. Howe's report on idiocy," was exhaustive, and ended by recommending the opening of an experimental school. One was opened at the expense of the state and under the guidance of Dr. Howe himself. The results were so favorable that in three years' time the state doubled its appropriation, and founded in South Boston the Massachusetts school for idiots, the first state school for them. The state of New York followed, establishing its school similarly, or experimentally, in 1851, and permanently in 1853.

Between the appointment of the Massachusetts commission and its report, a country physician, Dr. H. B. Wilbur, had opened a small private school for idiots at Barre, Mass., really the first school of its kind in America. Dr. Wilbur was soon called to take charge of the New York state school. The Pennsylvania school followed in 1852, and was established in Philadelphia as a private corporation in 1853; then in 1857 came the Ohio state institution at Columbus; in 1858 the semi-public school in Lakeville, Conn.; the Kentucky state school at Frankfort in 1860; the Illinois state school in 1865; the Hillside home, a private school at Fayville, Mass., in 1870. "Thus up to 1874, twenty-six years after this work was begun in America, public institutions for the feeble-minded had been established in seven states.

These institutions then had under training a total of 1,041 pupils. There were also two private institutions in Massachusetts, . . . with a total of 69 inmates."¹ Applications for admittance were numerous and pressing. At first it was the theory that only imbeciles, the improvable idiots, should be taken into the institution, that the institution should be a school and should graduate its pupils into the world. Still, it was but a few years before most of the superintendents recognized that the pupils would always be children though adult in years; and that as children they needed guidance and protection always; that for obvious reasons girls and women of child-bearing age should not be discharged—for no girl is so exposed as the simple, weak-willed, feeble-minded girl—and finally that practically all cases would have to be retained within the protection of the institution. Physiology and pathology now teach that "mental deficiency generally, if not always, is the result of a definite cerebral abnormality or defect, or the result of actual disease or damage to some part of the central nervous system;"² that feeble-mindedness is practically a permanent condition, and that it cannot be cured. From the time this fact came to be realized the institutions began to change in character. There arose two distinct departments—the training school and the asylum.

The school was, is, and ought to be the fundamentally important department. Education is just as much a right of the improvable imbecile or feeble-minded child as it is of any child; and what are always acknowledged to be the benefits of an education are no less benefits to the one than to the other. It is in the school that the feeble-minded child is to be aroused, developed and trained to lead a useful and a happy life. The aim in the education of an ordinary child is to give a liberal all-round training, fitting him for anything in life he may choose to take up. With our feeble-minded child the aim of his education, which is to

¹ Fernald, *The history of the treatment of the feeble-minded*, p. 8.

² Fernald, *Feeble-minded children*, p. 2.

lead a useful life within the institution, is kept ever in mind. He is happiest when occupied. Hence, his education is principally a practical education. The difference between a normal person and a feeble-minded person after training is that the latter has no initiative, no power to resist the seduction of stronger minds. He may be useful and even self-supporting, but he can become so only under guidance and direction.

When they come to school these children have extremely weak will power. In fact the feeble-minded as a class have been divided according to the attention, thus :

“ 1. Absolute idiocy. Complete absence and impossibility of attention.

“ 2. Simple idiocy. Attention feeble and difficult.

“ 3. Imbecility. Instability of attention.”¹

With all these the condition of the hand indicates that of the brain. The “idiotic hand” is proverbial. Many imbeciles see but do not perceive ; hear but do not understand. They rarely make a purposive effort, but need to be directed in everything. When it is comprehended that though they love games they do not even play of their own accord, it will be understood how their teachers must begin at the very bottom rung in the ladder of education. The special senses of seeing, hearing, and feeling, actually have to be aroused and developed, *first*, as simple physiological functions ; *secondly*, as intellectual faculties. Calisthenics in classes, marching to music, military drill — movements and exercises of all kinds — exert a most salutary and energizing influence, and are in great use in all the schools.

The normal child does not need to be taught each step ; his power of attention, his will, his desire, his originality enable him to fill the gaps in instruction from his own daily experiences. In fact he often learns more out of school than in. On the contrary, the feeble-minded child has to be taught each step, hence, his education is extremely slow.

¹ Sollier: *Psychologie de l'idiot et l'imbecile*, Paris, 1891. Quoted from G. E. Johnson, *Pedagogical seminary*, 3, 246.

The simple occupations of the kindergarten fit these children of eight to twelve years of age as they do bright children of four and five. The teacher devises all manner of busy work for them, generally using coarse materials; the stringing of spools; beads; buttons; spool-knitting; plain knitting; braiding with broad leather strips, with shoe-strings, with straw; and block building from the simple cube to the forms that are more complex.

No instruction is in more general use and is more helpful to the children than that of the kindergarten. After this all their education continues on a very elementary plane beyond which it is impossible for them to go. Many learn reading, writing, and arithmetic. The brightest read simple stories with pleasure, and go as far in arithmetic as multiplication. Division is beyond them.¹ Calculation in the abstract they cannot master. The greater part of their education is, therefore, of a purely practical kind. They are taught a good deal of fancy work, like knitting, crocheting, embroidery and lace-making; but chiefly domestic work, sewing, washing and ironing, baking, farming, housepainting, shoemaking, brushmaking, etc.

Entertainments flourish at these institutions. One is got up on every possible occasion; and the "men and women children" are always present. No discrimination as to age or capacity is permitted. Happiness prevails because, in direct contrast with what happens in the world, the simple are not scoffed at and driven to a corner, but are made to feel that they are as good as any one.

The institution is a small community. It must have a given number of employees, one or more to each section or department. But the stronger grown up children do the bulk of the work: baking, laundry work, shoemaking, sewing, mending, dressmaking and tailoring. Each institution aims to have as many acres of land as it has children, and on the grounds a barn, cattle, horses and all the paraphernalia of a farm. This farm is worked by the boys, their

¹ See Fernald. Feeble-minded children, p. 14.

cows producing all the milk the institution can consume, and the farm hands raising all their own vegetables and fruit, selling what they cannot store. By utilizing the energies of the pupils in profitable labor the average *per capita* expense may be reduced to \$125 or \$150 a year. Supt. Doren of the Columbus institution has said that if the state will provide him 1,000 acres of good land he will care for all the custodial cases in Ohio free of expense to the state. When an old school has moved to a new site as the Massachusetts school has recently done, the labor of the boys has been utilized in clearing the land and ditching it, in building the roads, etc. Where the grounds contain suitable clay soil, as at Fort Wayne, Indiana, the boys have made the bricks with which to build new structures as needed. But in all this care is taken that there is no overwork. The work of an average laboring man more than supports himself — it is generally reckoned to support three people. If the feeble-minded man does one-half or one-third of a man's work, and does it every day, his support costs only that which will pay for his superintendence and care.

The lowest cases of the unimprovable idiots, whom nearly all the institutions have been forced to admit, are termed the "custodial cases," and are kept by themselves. They are profoundly helpless, can neither speak nor attend to their bodily wants, but must be cared for like babies which they are. However, they must be attended to — washed, fed, and kept as decent as may be. Attendants willing to do this work are not easily found. But trained feeble-minded girls are delighted and flattered at the privilege of taking care of those more helpless than themselves. And it has been found that they make the best attendants for such cases.

So far, then, as methods of instruction go, American teachers have but broadened the physiological methods of the Frenchman, Seguin. The distinctive results of our schools lie in training the pupils to be helpful, especially in the way of labor for the institution which harbors them.

A distinctive result of work for the feeble-minded has been the gathering of statistics of causes. It has been known that a very large percentage of cases, variously estimated from 50 per cent to 70 per cent, are of congenital origin; that of all classes of defectives the feeble-minded most surely tend to transmit their defect; hence, that the feeble-minded must be sequestered for life. It has been shown that there is a strange but strong correlation between the forms of degeneracy, *i. e.*, the criminal, the inebriate, the prostitute, and the feeble-minded. Of late years the energies of charitable and sociologic organizations "Have turned towards combating the causes of degeneracy, thereby protecting posterity."¹ The United States census for 1890 gives in round numbers 95,000 feeble-minded and this number is undoubtedly short of the actual number. Still but one-twelfth or about 8,000 of those returned in the census are cared for in special institutions. Here is a terrible problem ahead for the sociologists to work out. Those who have most thoroughly studied the feeble-minded are convinced that, as prevention is cheaper than cure, so the gathering of all this vast army into institutions and especially colonies where fifty per cent of them can be taught to be at least partly self-supporting, and where their multiplication can be cut off, is, by all odds, the most economical and the best policy for the states to pursue in the future. It should not be forgotten that for every idiot cared for we restore at least one productive person to the community; some writers say more than one. The whole matter is receiving widespread and intelligent attention. A large number of our colleges offer courses in practical sociology, and the number of students taking these courses is constantly increasing.

The work for the feeble-minded is considered by those in it as being still in a tentative stage. Nearly all the superintendents are physicians; they do not agree on the different questions involved. They meet regularly in convention, and

¹ Powell, *Care of the feeble-minded*, p. 10.

have an organ of communication, called "The Journal of psycho-asthenics."

As the methods of teaching the feeble-minded and the other defective classes have become understood, they have modified the old methods of teaching children of normal intelligence. Child study is now interesting teachers, and already has led to the sending of many feeble-minded children to special schools for their training. The city of Providence, R. I., has recently led the way in a new movement, that of teaching in special classes the dull or backward pupils of the public schools. The movement is slowly spreading elsewhere, and, in justice both to the dull and the bright children, is of inestimable value, and, as such, is a hopeful sign of the times.¹

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¹ NOTE: A very radical experiment is being tried, particularly at the Kansas institution. The operation of castration has been performed on several boys, after which they have been found to be so improved that some were transferred from the custodial to the school department, some sent home.

² The bibliographies here printed constitute but a small part of what might be given.

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Statistics of schools for defective classes

Compiled from report commissioner of education 1896-77, 2 : 2335-60

	Blind	DEAF			FEEBLE-MINDED	
		State public institutions	Public day schools	Private day schools	Public institutions	Private
Institutions.....	36	54	22	19	18	10
Volumes in library.....	95 879	90 184	.....	.....	.....	.....
Value of scientific apparatus	\$13 300	\$21 394	.....	.....	.....	.....
Instructors.....	387	877	60	83	190	58
Pupils.....	3 630	9 301	506	532	8 177	357
Expenditures.....	\$920 224	\$2 401 402	\$42 827	.....	\$1 362 791	.....
Value of grounds and buildings.....	\$6 183 538	\$11 373 873	.....	.....	\$4 631 917	.....

Public schools for the deaf

From report of commissioner of education, 1896-97, 2: 2346-9

STATE	City	No. of pupils	Value of lands and buildings	Expenditures for support
Alabama.....	Talladega.....	143	\$125 000	\$30 222
Arkansas.....	Little Rock.....	228	100 000	43 500
California.....	Berkeley.....	171	450 000	59 650
Colorado.....	Colorado Springs.....	78	220 894	25 266
Connecticut.....	Hartford.....	157	250 000	43 100
D. C.....	Washington.....	132	700 000	70 858
D. C. Kendall school.....	Washington.....	65	.....	.....
Florida.....	St. Augustine.....	45	25 000	4 648
Georgia.....	Cavesprings.....	139	80 000	22 000
Illinois.....	Jacksonville.....	534	455 000	97 000
Indiana.....	Indianapolis.....	312	526 000	62 059
Iowa.....	Council Bluffs.....	316	500 000	61 700
Kansas.....	Olathe.....	250	250 000	46 500
Kentucky.....	Danville.....	323	200 000	48 061
Louisiana.....	Baton Rouge.....	93	300 000	16 500
Maine.....	Portland.....	69	30 000	14 000
Maryland.....	Baltimore.....	40	35 000	10 645
Maryland.....	Frederick.....	96	255 000	26 588
Massachusetts.....	Northampton.....	155	135 149	43 756
Michigan.....	Flint.....	417	426 255	63 558
Minnesota.....	Faribault.....	227	271 625	45 455
Mississippi.....	Jackson.....	114	75 000	16 430
Missouri.....	Fulton.....	345	310 000	92 000
Montana.....	Boulder.....	18	30 000	1 6 250
Nebraska.....	Omaha.....	143	120 000	55 240
New Jersey.....	Trenton.....	149	100 000	40 000
New Mexico.....	Santa Fe.....	14	6 000	4 000
New York.....	Buffalo.....	152	154 560	30 720
New York.....	Fordham.....	355	509 236	92 994
New York.....	Malone.....	87	89 586	22 936
New York.....	904 Lexington ave., New York.....	211	360 000	48 753
New York.....	Washington Heights.....	465	506 000	112 216
New York.....	Rochester.....	199	130 000	46 647
New York.....	Rome.....	137	125 000	39 612
North Carolina.....	Morganton.....	186	160 000	35 000
North Carolina.....	Raleigh.....	70	30 000	10 000
North Dakota.....	Devil's Lake.....	47	22 500	9 638
Ohio.....	Columbus.....	484	650 000	84 000
Oregon.....	Salem.....	51	25 000	12 000
Pennsylvania.....	Edgewood Park.....	209	257 137	50 134
Pennsylvania.....	Bala, Philadelphia.....	42	48 431	12 869
Pennsylvania.....	Mt. Airy, Philadelphia.....	509	1 000 000	135 940
Pennsylvania.....	Scranton.....	71	160 000	16 237
Rhode Island.....	Providence.....	60	60 000	19 000
South Carolina.....	Cedar Springs.....	96	55 000	17 288
South Dakota.....	Sioux Falls.....	43	60 000	12 250
Tennessee.....	Knoxville.....	259	150 000	30 800
Texas.....	Austin.....	262	225 000	43 114
Texas.....	Austin, colored d. and b.....	36	37 500	8 500
Utah.....	Ogden.....	67	200 000	20 000
Virginia.....	Staunton.....	105	80 000	21 000
Washington.....	Vancouver.....	66	100 000	29 000
West Virginia.....	Romney.....	128	85 000	25 737
Wisconsin.....	Delavan.....	221	118 000	39 800

¹ Includes the blind.

Public day schools for the deaf

From report of the commissioner of education, 1896-97, 2: 2350.

STATE	City	No. of pupils	Value of land and buildings	Expenditures for support
Illinois.....	Chicago (six schools)....	120	.....	.....
Indiana.....	Evansville.....	10	.....	\$1 000
Massachusetts.....	Boston.....	123	\$98 000	21 569
Michigan.....	Detroit.....	15	.....	650
Missouri.....	St. Louis.....	35	.....	.....
Ohio.....	Cincinnati.....	36	20 000	3 600
Ohio.....	Cincinnati.....	6	.....	800
Ohio.....	Cleveland.....	38	.....	2 500
Wisconsin.....	Eau Claire.....	6	.....	585
Wisconsin.....	Fond du Lac.....	7	.....	630
Wisconsin.....	La Crosse.....	9	.....	525
Wisconsin.....	Manitowoc.....	9	.....	1 019
Wisconsin.....	Marinette.....	6	.....	522
Wisconsin.....	Milwaukee.....	54	12 000	6 291
Wisconsin.....	Oshkosh.....	13	.....	1 000
Wisconsin.....	Sheboygan.....	7	.....	875
Wisconsin.....	Wausau.....	12	.....	1 261

Private schools for the deaf

From report of the commissioner of education, 1896-97, 2: 2351.

STATE	City	No. of pupils
California.....	North Tamescal.....	27
Connecticut.....	Mystic.....	29
Illinois.....	Chicago (three schools).....	146
Iowa.....	Dubuque.....	5
Louisiana.....	Chincuba.....	56
Maryland.....	Baltimore.....	26
Massachusetts.....	Beverly.....	24
Massachusetts.....	West Medford.....	10
Michigan.....	North Detroit.....	36
Missouri.....	St. Louis (two schools).....	80
Nebraska.....	Omaha.....	9
New Mexico.....	Santa Fe.....	8
New York.....	Albany.....	15
New York.....	New York.....	18
Ohio.....	Cincinnati.....	12
Wisconsin.....	St. Francis.....	31

Schools for the blind

From report of commissioner of education, 1896-97, 2: 2340-I.

STATE	City	Number of pupils	Value of land and buildings	Expenditures for support
Alabama	Talladega	70	\$55 000	\$15 000
Arkansas	Little Rock			
California	Berkeley	50	450 000	57 616
Colorado	Colorado Springs	55	220 894	17 944
Florida	St. Augustine	7	20 000	8 507
Georgia	Macon	126	125 000	18 000
Illinois	Jacksonville	220	225 000	52 000
Indiana	Indianapolis	137	548 870	26 130
Iowa	Vinton	186	300 000	32 847
Kansas	Kansas City	137	100 000	20 570
Kentucky	Louisville	127	100 000	24 522
Louisiana	Baton Rouge	33	40 000	9 577
Maryland	Baltimore	99	350 000	25 992
Maryland colored b. and d.	Baltimore	25	35 000	8 000
Massachusetts	South Boston	251	517 027	¹ 30 000
Michigan	Lansing	106	165 484	25 098
Minnesota	Faribault	70	50 000	17 074
Mississippi	Jackson	30	60 000	3 600
Missouri	St. Louis	117	150 000	29 100
Montana	Boulder	6		1 800
Nebraska	Nebraska City	77	45 000	20 103
New York	Batavia	130	375 000	41 500
New York	New York	227	384 957	76 001
North Carolina	Raleigh	157	150 000	30 000
Ohio	Columbus	301	550 000	42 936
Oregon	Salem	24	17 000	7 150
Pennsylvania	Philadelphia	192	157 306	53 683
Pennsylvania	Pittsburg	68	260 000	15 226
South Carolina	Cedar Spring	48	55 000	17 000
Tennessee	Nashville	102	100 000	18 000
Texas	Austin	169	75 000	39 350
Texas colored b. and d.	Austin	40	37 000	8 200
Virginia	Staunton	48	80 000	15 000
Washington	Vancouver	14	100 000	
West Virginia	Romney	56	85 000	11 260
Wisconsin	Janesville	125	200 000	23 000

¹ State grant.

Public institutions for the feeble-minded

From Powell: Proceedings of the 24th national conference of charities correction, 1897, p. 290

STATE	City	No. inmates	No. in school dept.	No. custodial dept.	No. epileptics	Value of land and buildings	Expenditures for support ¹
California.....	Eldridge.....	470	256	154	98	\$400 000	\$75 000
Illinois.....	Lincoln.....	642	171	137	124	300 500	101 130
Indiana.....	Fort Wayne.....	554	320	233	135	375 000	79 560
Iowa.....	Glenwood.....	690	331	359	178	350 000	102 080
Kansas.....	Winfield.....	118	63	36	26	60 620	17 988
Kentucky.....	Frankfort.....	123	115	.....	6	80 000	25 000
Massachusetts.....	Waltham.....	423	228	195	60	250 000	63 377
Michigan.....	Lapeer.....	200	127	38	4	75 000	35 000
Minnesota.....	Faribault.....	574	210	310	138	359 720	98 767
Nebraska.....	Beatrice.....	220	112	60	60	200 000	36 500
New York:							
Children.....	Syracuse.....	532	400	133	45	421 330	90 112
Women.....	Newark.....	386	.....	386	16	179 011	51 876
Custodial.....	Rome.....	327	.....	327	11	271 733	.....
Randall's Island.....	New York.....	364	.....	.....	.....	.....	.....
New Jersey:							
Children.....	Vineland.....	217	.....	.....	.....	100 000	46 609
Women.....	Vineland.....	94	.....	.....	33	.....	20 000
Ohio.....	Columbus.....	973	.....	.....	.....	698 582	183 231
Pennsylvania:							
East.....	Elwyn.....	1 028	402	516	197	560 639	163 137
West.....	Polk.....	225	.....	55	30	500 000	.....
Washington.....	Vancouver.....	41	41	.....	.....	20 000	.....

¹ From report of the commissioner of education, 1896-97, 2 : 2353-4.

Private schools for the feeble-minded

From report of the commissioner of education, 1896-97, 2 : 2355.

STATE	City	No. of pupils
Connecticut.....	Lakeville.....	168
Illinois.....	Godfrey.....	3
Maryland.....	Ellicott City.....	32
Massachusetts.....	Amherst.....	10
Massachusetts.....	Barre.....	49
Massachusetts.....	Fayville.....	4
Michigan.....	Kalamazoo.....	30
New Jersey.....	Cranbury.....	17
New Jersey.....	Haddonfield.....	19
New Jersey.....	Orange.....	25

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